XXIV.—Notes on Myriapoda.—XVI. Some Observations on Nomenclature. By Hilda K. Brade-Birks, M.Sc., M.B., Ch.B., L.R.C.P., M.R.C.S., and the Rev. S. Graham Brade-Birks, M.Sc.

In a recent contribution to this Journal (1), in which Mr. R. S. Bagnall has dealt most admirably with the synonymy of three Leachian species of Diplopoda, our colleague evidently has in view the same objects which have actuated us in preparing the present paper—in the first place, the solution of some of the nomenclatural difficulties which beset the path of the molern student of English myriapodology, and then, again, the restoration of old specific names to their

rightful place in our system of classification.

Not long ago we cited (2) in tabular form the species mentioned as English by Newport in his list of 1844 (5) and his catalogue of 1856 (6), adding some remarks of our own about synonymy in the last column. On that occasion we were doubtful about the validity of a number of names in common use. The specific designations we are about to advocate in the present note are, with the exception of the last, all to be found in the first column of the table to which reference has just been made (2), and they are there prefixed by the numbers which will now be set against them.

Passing through London recently, we paid a visit to the British Museum (Natural History), where we were courteously permitted to examine some of the types referred to in Newport's list (5) and catalogue (6), as well as other dry specimens of English "Myriapoda" dating back many years, and named, therefore, no doubt according to type. Subsequently, in the present note, we shall refer to certain of these old and valuable specimens (some of which may quite well be types, even though they are not labelled as such) as

"classical examples."

As a result of our examination, we feel justified in drawing attention to several points connected with nomenclature, and we now advocate the use of the specific names which head

the following paragraphs.

We take this opportunity of thanking Mr. A. S. Hirst, of the Department of Zoology at Cromwell Road, for facilitating our examination of a small part of the valuable collection of specimens under his care.

CHILOPODA.

5. Lithobius melanops, Newport.

The examination of a classical example of Newport's species confirms our contention (2) that *Lithobius glabratus*, C. L. Koch, is a synonym.

DIPLOPODA.

20. Craspedosoma rawlinsi, Leach.

We agree with Mr. Bagnall (1) in regarding *Craspedosoma* simile, Verhoeff, as a synonym.

21. Polymicrodon polydesmoides (Leach).

Again we agree with Mr. Bagnall (1). Polymicroden latzeli (Verhoeff) must be considered as a synonym. We have seen Leach's type.

23. Iulus (Ophiiulus) pilosus, Newport.

A labelled classical example—a male—proves conclusively that this is *Iulus* (*Ophiiulus*) fallax, Meinert. As Newport's name is of earlier date, it takes precedence.

24. Tachypodoinlus niger (Leach).

We saw Leach's type, and, as it exhibits the characteristic striation of the prozonites of *Tachypodoiulus albip's* (C. L. Koch), the synonymy so often suggested is established in favour of Leach's name.

27. Cylindroiulus punctatus (Leach).

The type appears to be a female, but there can be little reasonable doubt that this is Cylindroiulus silvarum (Meinert). Externally the two are identical, and no other club-tailed species of these dimensions has been recorded from England. Meinert's name must therefore give place to Leach's.

28. Brachyiulus (Microbrachyiulus) pusillus (Leach).

We have seen Leach's type. We agree with Mr. Bagnall (1) in regarding as synonymous with this species Brachyiulus (Microbrachyiulus) littoralis (Verhoeff). Of course, Leach's name takes precedence.

29. Cylindroiulus latistriatus (Curtis).

In 1844 John Curtis, F.L.S., contributed a paper (3) to the 'Journal of the Royal Agricultural Society,' in which he gave a brief description of several English Diplopoda. One of these he calls "Julus Londinensis of Leach," and gives two excellent figures, which show conclusively that even at that early date the typical "Julus" londinensis, Leach, was confused with the animal often known since (especially on the continent) under that name, for Curtis's figures are obviously of Cylindroiulus londinensis teutonicus (Pocoek), which is tailless, whereas the true Cylindroiulus londinensis (Leach), which Curtis thought he was figuring, has a clubbed tail and is a much larger animal. What Curtis meant by "Julus Londinensis of Leach" is important when we come to his description of "Julus" latistriatus.

Curtis (loc. cir.) tells us that his specimens of latistriatus were sent to him from Namptwich (Nantwich), Cheshire, where they constituted a pest in garden and greenhouses. In London we saw the specimens Curtis presented to the British Museum (5), and we must regard them as his types. Externally they agree with Cylindroiulus britannicus (Verliceff), and when we remember that this species is well established in the north of England (it is a pest in a greenhouse at Darwen, Lancashire), we can have little doubt about the synonymy of the two. For these reasons we strongly advocate the restoration of the specific designation used by Curtis and the rejection of that of Verhoeff which was established in 1891.

Curtis's paper (3) was overlooked by Latzel when he compiled the bibliography for his monumental work (4), and it is probably unknown to many myriapodologists. We therefore append the original description of the species

with which we are now especially concerned :-

"Julus latistriatus, Curtis, the broad-lined Snake-millipede, is 5 or 6 lines long, of a dull ochreous lilae with a purple tint, cylindrical, very shining, sparingly striated, the lines not approximating; down each side is a row of dots, and the penu timate segment is not mucronated, but slightly angulated and rounded, as in Julus Londinensis; the antenne are stout and rather short, pilose and capitate, second joint the longest, the apex very pubescent."

Curtis adds that he at first took this "Julus" for the young of "londinensis," but that the strice were twice as far

apart as in any other species he had examined.

30. Trichoblaniulus guttulatus (Bosc).

Examination of several classical examples of Julus pulchellus, Leach, shows sufficiently conclusively that they are referable to the blind species Trichoblaniulus guttulatus (Bosc), which was established before Leach's name was

given.

Although it does not concern our present study very closely, we may add that it follows, of course, that the specific name pulchellus is obsolete and cannot be used for the species furnished with occlli often referred to under that name. For this animal we must in future use the later designation Nopoiulus venustus (Meinert).

References.

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(2) BRADE-BIRKS, HILDA K., and S. GRAHAM. "Notes on Myriapoda.—XIII. Some Kent Records." Lancs. & Ches. Nat. 1918,

nos. 126 & 127, vol. xi. pp. 152 et seq. & pp. 186 et seq.

(3) CURTIS, JOHN. "Observations on the Natural History and Economy of the Insects called Wireworms, affecting the Turnips, Corncrops, &c.; also of their parents the Elaters or Beetles, called Skip-jacks, Click-beetles, &c." Journ. Roy. Agri. Soc. 1844, pt. 1, vol. v. pp. 180 et seq., with figures.

(4) Latzel, R. 'Die Myriopoden der österreichisch-ungarischen Monarchie.' 1880-4.

(5) NewPort, G. 'List of the Specimens of Myriapoda in the Collection of the British Museum.' 1844.

(6) —. 'Catalogue of the Myriapoda in the Collection of the British Museum.-Pt. 1. Chilopoda.

16 Bank Street, Darwen, Lancashire, 15th January, 1919.

XXV.—Some Observations on Pleurocystis cuénoti, Hesse, 1909, a Calozoic Parasite of the Earthworm. By W. HAROLD LEIGH-SHARPE, B.Sc. (Lond.).

On February 14th, 1918, upon opening a Helodrilus (Allolohophora) longus, Ude, obtained from Red Lion Square, Helborn, London, I discovered seven specimens of diploids (fourteen individuals in all) of the gregarine parasite Pleurocystis cuénoti, Hesse, 1909, some of which I have herein figured.